King County

SEPA ENVIRONMENTAL CHECKLIST
GRIFFIN CREEK ALLUVIAL FAN PILOT PROJECT

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies:

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals:

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

A. Background

1. Name of proposed project, if applicable: **Griffin Creek Alluvial Fan Pilot Project**

2. Name of applicant: **Stormwater Services, Water & Land Resource Division, King County Department of Natural Resources & Parks**

3. Address and phone number of applicant and contact person: **King Street Center, 201 S Jackson Street, Suite 5600, Seattle WA 98104 206-477-3232 Lou Beck.**

4. Date checklist prepared: **July 7, 2022**

5. Agency requesting checklist: **King County Department of Local Services, Permitting Division &/or King County Water & Land Resource Division**

6. Proposed timing or schedule (including phasing, if applicable): **Construction to take place in September 2022 and September 2023 to coincide with the Washington Department of Fish and Wildlife (WDFW) conditions for in-stream work in the Snoqualmie Basin**

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? **No** If yes, explain.

8. List any environmental information you know about that has been prepared, or will be *prepared, directly related to this proposal.* **Critical Areas report for King County Clearing and Grading permit application submittal**

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? **No** *If yes, explain.*

10. List any government approvals or permits that will be needed for your proposal, if known.
Hydraulic Project Approval (HPA) - WDFW
Clearing and Grading Permit, Shoreline Exemption - King County
Archeological site permit WA DAHP

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

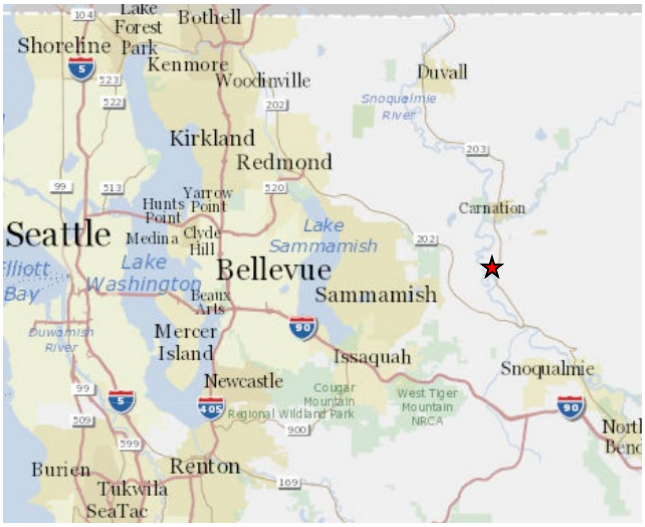
This is a multi-benefit project. Goals are protecting agricultural lands and farm infrastructure by improving field drainage in the fall and spring "shoulder season" while also improving fish passage and riparian conditions along an important salmon migration corridor. The salient elements of the project:

- **Remove recently deposited coarse sediments in ~1600 ft. of the Griffin Creek channel that forced flows out of the existing single thread channel and now inundate adjacent farm fields. This action will also improve fish passage at all flow conditions**
- **Create an overflow side channel to increase project resiliency and provide off-channel habitat**
- **Place large wood to increase in-channel habitat complexity**
- **Plant native trees and shrubs in the Griffin Creek riparian corridor**
- **Replace two bridges and re-grade farm road bridge approaches at the downstream end of the project area**

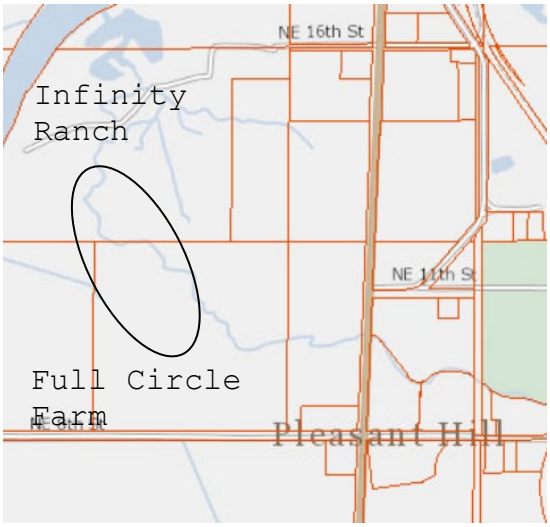
12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

Township 25, Range 7, Section 28, NW ¼. 31919 NE 16TH ST Carnation WA 98014

The project is located on Griffin Creek in the vicinity of Carnation WA beginning ~1500 ft. downstream of the SR 203 road crossing and running downstream for 16000 ft. ending approximately 1000 ft. above the confluence with the Snoqualmie River



A. Vicinity Map



B. Project Area

Cooperating landowners' parcels: Infinity Ranch #2825079022, Full Circle Farms #2825079020, #2825079023

B. Environmental Elements

1. *Earth*

a. General description of the site:

(circle one): Flat, rolling, hilly, steep slopes, mountainous, other _____

b. What is the steepest slope on the site (approximate percent slope)? **3%**

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils. **Edgewick Silt Loam; a prime farmland soil. Project area and vicinity are used for in commercial agriculture. The project is designed to increase the utility of these soils for farming. Soils excavated for the side channel will be retained onsite. Fluvially deposited coarse gravels are found within the stream channel. Portions of the excavated**

gravels will be removed from the site to provide compensatory storage to meet flood hazard codes

d. Are there surface indications or history of unstable soils in the immediate vicinity? **No** *If so, describe.*

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill. **Removing accumulated sediments from 1600 ft. of Griffin Creek channel and creating a 750 ft. long by average 22 ft. wide overflow side channel will disturb approximately 0.7 ac. in total.**

Total volume of excavation will be ~5000 yd^3 . This material will be used to construct bridge approaches and level farm fields. A total of ~750 yd^3 of excavated material (deposited gravels) will be removed from the floodplain and used as fill on upland portions of the property outside of the project area.

f. Could erosion occur as a result of clearing, construction, or use? **No** *If so, generally describe.*

g. *About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?* **0.5% Limited to the bridge decks and approaches on an existing gravel road**

h. *Proposed measures to reduce or control erosion, or other impacts to the earth, if any:*
Best Management Practices and Erosion Control techniques will be in place, the project will take place in late summer when surface water is absent.

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.
Diesel exhaust from equipment used during the excavation, end haul, construction of bridge approaches and setting the bridge decks

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. **No**

c. Proposed measures to reduce or control emissions or other impacts to air, if any: **None**

3. Water

a. Surface Water:

1) *Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.*

Griffin Creek, a shoreline of the state, flows through the project area. Griffin Creek is a tributary of the Snoqualmie River

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

Yes. Recently deposited coarse sediments will be removed from the stream channel to reestablish a surface water connection between dewatered portions of Griffin Creek. plans attached

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

Approximately 2300 yd^3 of recently deposited coarse sediments will be removed from the stream channel

4) Will the proposal require surface water withdrawals or diversions? **Yes** *Give general description, purpose, and approximate quantities if known.*

Work will be conducted during periods of low stream flow. Much of the surface water is already rerouted by the avulsion and thus outside of the project area until the excavation is completed. For portions of the stream channel with water, a steel plate or water bladder "coffer dam" will isolate the area of excavation and the stream flow pumped around the area of construction to the channel further downstream.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

Yes, noted on Site Plan

6) Does the proposal involve any discharges of waste materials to surface waters? **No** *If so, describe the type of waste and anticipated volume of discharge.*

b. Ground Water:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? **No** *If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater?* **No** *Give general description, purpose, and approximate quantities if known.*

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). **No** *Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.* **Not Applicable**
No discharge of waste material is associated with the project

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Runoff will be minimal as the work is conducted on agricultural soils that are extremely pervious or within a dewatered stream channel. The bridge replacement approaches

are on existing impervious surfaces and any associated runoff will be routed into an existing ditch system that includes sediment catch basins, and discharged to ground
2) Could waste materials enter ground or surface waters? **No** If *so, generally describe.*

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If *so, describe.*

The project will route water currently inundating farm fields back into the single thread stream channel that existed prior to the 2020 storm event causing the avulsion. Field drainage should be enhanced by the side channel creation, and drainage ditch maintenance

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage *pattern impacts, if any:*

An erosion control plan will be implemented. A temporary barrier will hydraulically isolate the excavation in the stream channel. Any water entering the work site will be routed downstream of the project area using the BMP's developed for the Agricultural Drainage Assistance Program (ADAP) Work will be conducted during periods of low stream flow (August, September)

4. Plants

a. Check the types of vegetation found on the site:

X deciduous tree: alder, maple, aspen, other
X evergreen tree: fir, cedar, pine, other
X shrubs
X grass
X pasture
____crop or grain
____ Orchards, vineyards or other permanent crops.
____ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
____water plants: water lily, eelgrass, milfoil, other
____other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

Reed canary grass (*Phalaris arundinacea*) will be removed in the area where the ~1000 ft. side channel will be excavated

c. List threatened and endangered species known to be on or near the site.
None known

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Approximately 6 ac. riparian area adjacent to and including the project site will be planted with native trees and shrubs. The objective to provide full canopy cover on the site once the vegetation matures

e. List all noxious weeds and invasive species known to be on or near the site.

Reed canary grass (*Phalaris arundinacea*)

5. Animals

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site.

Mammals: Deer, beaver,
Birds: eagles, hawks, geese, ducks, songbirds
Fish: coho salmon, Chinook salmon

b. List any threatened and endangered species known to be on or near the site.

ESA Threatened Chinook Salmon (*Oncorhynchus tshawytscha*), **Steelhead trout** (*O. mykiss*)

c. Is the site part of a migration route? If so, explain.

Griffin Creek is an upstream migration route for coho salmon moving from the Snoqualmie River to spawning beds further upstream.

d. Proposed measures to preserve or enhance wildlife, if any:

The project will enhance fish passage, allowing mature salmon to move upstream at all flow levels. Placement of large wood in the stream channel and side channel will add habitat complexity and planting the riparian area will provide ecological services to the aquatic system

e. List any invasive animal species known to be on or near the site.

None Known

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

The construction equipment is diesel powered.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe. **No**

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any: **None**

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe. **No**

1) *Describe any known or possible contamination at the site from present or past uses.*

None

2) *Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines*

located within the project area and in the vicinity. **No such conditions will exist**

3) *Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.* **Diesel and hydraulic fluid for the construction equipment**

4) *Describe special emergency services that might be required.* **None anticipated**

5) *Proposed measures to reduce or control environmental health hazards, if any:* **Spill prevention, control, and countermeasure (SPCC) plan will be in place**

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? **Construction equipment**

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site. **Construction equipment 80-90 dB. 7am to 7pm weekdays, 9am to 7pm weekends. Short term (approximately 2 weeks)**

3) Proposed measures to reduce or control noise impacts, if any: **Limit operations to hours allowed under King County Code**

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties? **Agriculture** *Will the proposal affect current land uses on nearby or adjacent properties?* **No** *If so, describe.*

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use? **Yes, the entire project area is within an actively managed pasture. No land will be converted, the project should increase the utility of the site for farming**

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? **No** *If so, how:*

c. Describe any structures on the site. **Two existing farm road bridges**

d. Will any structures be demolished? **The structures will be replaced** If *so, what?*

e. What is the current zoning classification of the site? **A 35**

f. What is the current comprehensive plan designation of the site? **Agriculture**

g. If applicable, what is the current shoreline master program designation of the site? **Resource**

h. Has any part of the site been classified as a critical area by the city or county? **Yes** *If so, specify.* **The site is within the 100 yr. floodplain, the entire area is mapped as a Seismic Hazard. Portions of the surrounding parcel have been designated as wetland (grazed wet meadow)**

i. Approximately how many people would reside or work in the completed project? **0**

j. Approximately how many people would the completed project displace? **0**

k. Proposed measures to avoid or reduce displacement impacts, if any: **None**

L. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: **None, the project is designed to support the existing land uses**

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any: **None, the project is designed to increase the agricultural productivity of the site and adjacent area**

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. **0**

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. **0**

c. Proposed measures to reduce or control housing impacts, if any: **None**

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed? **5 ft (bridge deck), concrete slab**

b. What views in the immediate vicinity would be altered or obstructed? **None**

b. *Proposed measures to reduce or control aesthetic impacts, if any:* **None**

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur? **None**

b. Could light or glare from the finished project be a safety hazard or interfere with views? **No**

c. What existing off-site sources of light or glare may affect your proposal? **None**

d. Proposed measures to reduce or control light and glare impacts, if any: **None**

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

Water related activities (boating, tubing, swimming, fishing) in the adjacent Snoqualmie River

b. Would the proposed project displace any existing recreational uses? **No** *If so, describe.*

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: **None**

13. Historic and cultural preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers ? If so, specifically describe. **No**

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources. **Yes. The project area is within a known archeological site (45KI55). Past studies include Lentz 1999, Stump and Stone (2000), Williams (2006). King County conducted a Cultural Resources Review in 2020**

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

A professional archeologist has been employed to conduct landowner outreach, tribal consultation, obtain a WA DAHP license and perform on-site surveys and monitoring during construction

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

The King County DNRP Historic Preservation Program Cultural Resources Review will be implemented. This includes obtaining a WA DAHP license and performing preconstruction surveys and during construction monitoring

14. Transportation

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. **None, private farm road access** *Show on site plans, if any.*

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. **No** *If not, what is the approximate distance to the nearest transit stop?* **2.5 mi.**

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate? **0**

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private). **Surface maintenance and grading of a private farm field access road**

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? **No** *If so, generally describe.*

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates? **0**

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? **No** *If so, generally describe.*

h. Proposed measures to reduce or control transportation impacts, if any: **None**

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? **No** *If so, generally describe.*

b. Proposed measures to reduce or control direct impacts on public services, if any. **None**

16. Utilities

a. Circle utilities currently available at the site:
electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other **No utilities are available at the site**

b. *Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed*. **No utilities are proposed for the project**

C. Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature:

Name of signee **Eric Beach**

Position and Agency/Organization

Regulatory/Permitting Specialist, King County Water and Land Resource Division

Date Submitted: **7/11/2022**

Greenhouse Gas (GHG) Emissions Worksheet

Project Name: Griffin Creek Alluvial Fan Pilot Project

Project Manager: Lou Beck
Assessment Completed by: Eric Beach
Date of completion: 7/11/2022

Project Description: Excavation of ~5000CY to reestablish surface water connection in Griffin Creek single thread channel. Install 2 farm road bridges. Construct side/overflow channel. Plant 4 acres of riparian area

DocuSigned by:
Eric Beach
Preparer's Signature
7/18/2022

Construction-related Greenhouse Gas Emissions

	Pounds	Metric tons
Emissions from fuel-burning activities (in CO2e):	915658.73	415.45
Emissions from embedded materials (in CO2e):	0	0
Emissions resulting from site impacts (in CO2e):	0	0
Total Emissions (in CO2e):	**915658.73**	**415.45**

Project-Related Carbon Sequestration

	Pounds	Metric tons
Total Carbon Sequestration 35 years after planting:	**1272096.00**	**577.18**